

(R-7) **Runoff Class Based on Field Slope and Permeability Class<sup>1</sup>**

Slope %	Very Rapid >20 (in/hr)	Rapid 20-6 (in/hr)	Moderately Rapid 6-2 (in/hr)	Moderate 2-0.6 (in/hr)	Moderately Slow 0.6-0.2 (in/hr)	Slow 0.2-0.06 (in/hr)	Very Slow 0.06-0.0015 (in/hr)	Impermeable <0.0015 (in/hr)
Level or Concave	N	N	N	N	N	N	N	VH
>0 to 1	N	N	N	N	L	M	H	VH
1 to <5	N	N	VL	L	M	H	VH	VH
5-<10	VL	VL	L	M	H	VH	VH	VH
10-<20	VL	VL	L	M	H	VH	VH	VH
>20	L	L	M	H	VH	VH	VH	VH

**Note:** Adapted from the National Soil Survey Handbook.

<sup>1</sup>Based on the most restrictive horizon above 20 inches. If the most restrictive horizon is between 20 and 40 inches, the runoff estimate should be reduced by one class (e.g., medium to low). If the most restrictive layer in the soil is below 40 inches, use the lowest class that occurs above 40 inches.

**Runoff Classes:** N-negligible, VL-very low, L-low, M-medium, H-high, VH-very high

**Special Rule 1** - A soil horizon that has a seasonal water table is assumed to have very slow permeability.

**Special Rule 2** - Runoff is rated as "negligible" (N) if the soil is in a depression, regardless of the permeability.

- Assumptions:**
1. Soil Permeability based on bare soil surface.
  2. Low water retention due to ground surface irregularities.
  3. Steady ponded infiltration rate.
  4. Bulk density of upper 10" is within normal range for the soil.